Great Lakes Research and Education Center celebrates successful first year

By Joy Marburger and Wendy Smith

IN ITS FIRST FULL YEAR of operation the Great Lakes Research and Education Center (GLREC), located at Indiana Dunes National Lakeshore, made tremendous progress toward its goals of facilitating outstanding research and education opportunities for its network parks. Research learning centers like this one are a key component of the Natural Resource Challenge because they involve a wide spectrum of Americans in opportunities to better understand our natural world and facilitate collaborative research efforts that benefit the parks. With this in mind the GLREC launched an array of research and education projects in 2003.

As with any new enterprise, much of the first year was spent making people aware of the center's services and potential. Joy Marburger, GLREC research coordinator, and Wendy Smith,

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GLREC education coordinator, began early on to network with researchers, managers, educators, and the public to promote natural resource research that addresses broad management issues in the Great Lakes Network parks. All the hard work resulted in a number of collaborative activities that use current research and are designed to benefit the parks.

Two research projects were established in 2003 at Indiana Dunes, Pictured Rocks, and Sleeping Bear Dunes National Lakeshores. The projects involved collaboration with other organizations and agencies. For example, researchers from the U.S. Geological Survey (USGS) and the Chicago Botanic Garden conducted research on the population genetics of Pitcher's thistle (Cirsium pitcheri), a federally threatened species. Another project explored the population genetics of marram beach grass (Ammophila breviligulata) and associated soil fungi, which was conducted by Chicago Botanic Garden and Cornell University researchers. Both projects will help park managers develop better freshwater beach restoration methods.

Collaborative research efforts are of clear value to national park managers. "The Great Lakes Research and Education Center's role in facilitating multi-park research projects definitely provides wider avenues for researchers to address national park management issues in a variety of disciplines," according to Indiana Dunes National Lakeshore superintendent Dale Engquist.

The highlight of outreach activities involving multiple parks was a successful two-day purple loosestrife workshop held in Spooner,

research learning centers







Above right: Participants at an August 2003 workshop hosted by Great Lakes Research and Education Center learn hands-on survey and control methods for purple loosestrife, a nonnative plant, from USGS researcher Beth Middleton (top left). Controlling purple loosestrife is of special concern because it is highly invasive and forms dense stands that restrict native wetland plants and reduce habitat for waterfowl.

Bottom left: Robin Goettel, Illinois-Indiana Sea Grant communications coordinator, demonstrates a purple loosestrife invasion in a model wetland. Participants drew representative wetland plants and animals on paper, and purple confetti, representing dispersing seeds, was blown across the wetland with a fan.

Wisconsin, in late August 2003. Purple loosestrife (*Lythrum salicaria*) is a highly invasive, nonnative plant that forms dense stands that restrict native wetland plants and reduce habitat for waterfowl. The workshop was designed to foster interagency partnerships with Great Lakes national parks to integrate research information with hands-on survey and control methods, and to provide education and outreach tools to teachers and volunteers.

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Speakers represented a wide range of agencies and organizations and presented information from the perspectives of federal, state, and local concerns. Workshop participants also represented a broad range of stakeholders, including resource managers, interpreters, educators, researchers from nonprofit organizations, businesses, and concerned citizens. Many of the participants enthusiastically volunteered to assist with a USGS purple loosestrife monitoring project and Wisconsin's biological control program. Workshop evaluations showed that people appreciated the interaction of speakers and participants from diverse areas, the flow of ideas among groups, the exploration of communication issues on purple loosestrife control,

and the opportunity to become involved in hands-on scientific research. The workshop was rated excellent or above average by 92% of the participants.

From facilitating research projects to hosting the purple loosestrife workshop, the GLREC has begun to fulfill its role as a field station for collaborative research and educational activities. In the years ahead it will continue to attract researchers to address a multitude of management issues facing Great Lakes parks and assist with development of related educational outreach programs.

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NPSFACT

Funding for natural resource management and research in the national parks more than doubled over the last 10 years, from \$87.0 million in FY 1994 to \$191.0 million in FY 2003. This dramatic increase includes \$67.4 million as a result of the Natural Resource Challenge. As a percentage of the budget for the operation of the National Park System (ONPS), natural resource management and research funding rose from 10.4% to 12.2% over this period.

From guests to researchers: The adaptive reuse of McGraw Ranch

By Judy Visty

Research learning centers of the National Park Service combine the elements of field stations, partnerships, active support of research, and information transfer to fulfill the mandate of the Natural Resource Challenge. In September 2003, the Continental Divide Research Learning Center inaugurated its year-round residential campus located at the historic McGraw Ranch (photo) in Rocky Mountain National Park (Colorado).

A main focus of the research learning centers is to reuse existing facilities to provide expanded bed, office, and lab space for scientists and educators. In 1988, when the park acquired the McGraw Ranch property, it intended to raze the buildings and restore the land to elk and bighorn sheep habitat. A new superintendent at the time, Randy Jones, and a statewide outcry from preservationists led to a partnership with the National Trust for Historic Preservation. Fee demonstration funds, Colorado's State Historical Fund, and donations



Visiting researchers to Rocky Mountain National Park are now able to bunk, prepare food, and use office facilities at the refurbished McGraw Ranch, the residential campus of the Continental Divide Research Learning Center.

from the National Trust, Rocky Mountain National Park Associates, and private individuals paid for the \$2 million project, which was completed in 2003.

Adding bunk beds may seem like an odd way to instigate government reform, but beds for visiting researchers are a key to ensuring their willingness and ability to come to parks to

do research. Most visiting researchers cannot afford the high temporary housing costs found near many national parks. And camping in a tent for several weeks may sound romantic but has limitations when fieldwork involves long hours, bad weather, and strenuous physical activity. A room with shared kitchen facilities allows a researcher to have a dry place to write up notes, eat, and get a good night's sleep before going out and doing it all over again. The "field station" environment at McGraw Ranch also fosters information exchange with other scientists and park staff.

Further information on the Continental Divide Research Learning Center is available on the Web at http://www.nps.gov/romo/education/CDRLC/index.html or from the author (judy_visty@nps.gov, 970-586-1302).

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